CATS NEWSLETTER

PRESIDENTIAL RAMBLINGS

NEW OFFICERS

At the June meeting, we held elections and the following people were elected to the various officer positions of CATS:

President

Bill Barnhart

1st Vice President

Hank Dickson

2nd Vice President

George Rey

Recording Secretary

Ruth Fegley

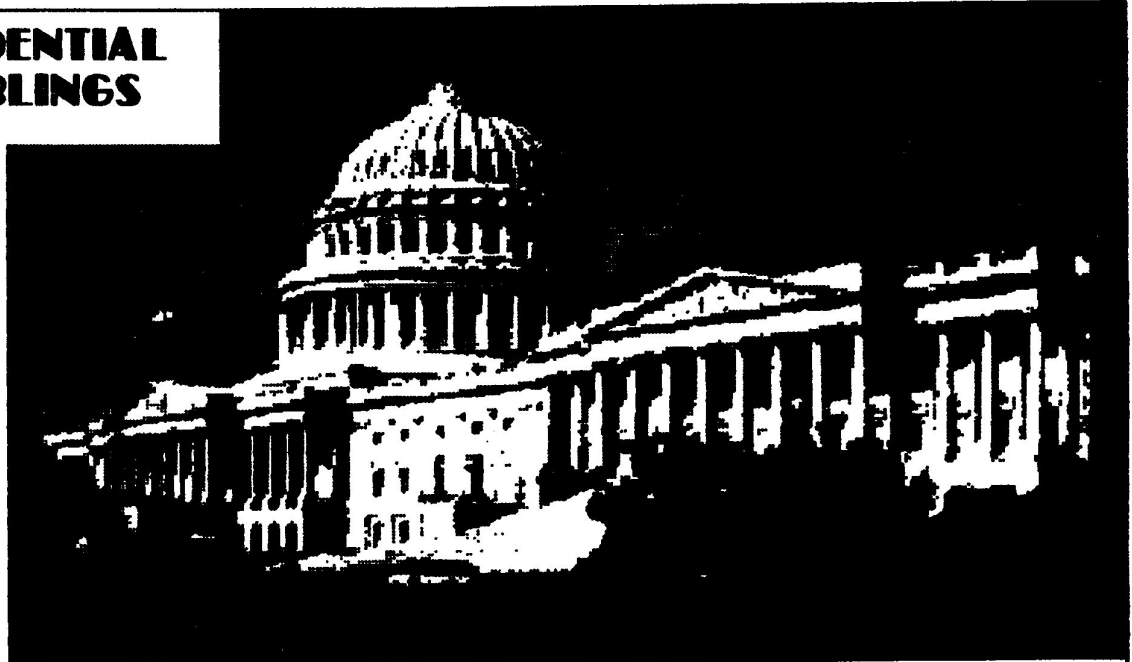**Corresponding Secretary**

Joe Miller

Treasurer

Barry Washington

Since we officers are all volunteers, please give us all the help that you can! Thanks!

CONSTITUTION CHANGES

Also at the June meeting (and before the elections), the membership approved constitution changes retitling the current Secretary office as Recording Secretary and adding the new position of Corresponding Secretary.

PASCAL and Other Famous Mathematicians

At the June meeting, Duane Parker gave an outstanding presentation on the language PASCAL and the QL compiler for it which included detail instructions and demos on QL networking - we had 7 going at one time! Thanks, Duane, for all of your efforts that went into it.

DISK MYSTERIES REVEALED

At the July meeting, Tom Bent is going to give us his presentation on disks and disks drives. I'm sure it will be one of Tom's usual high quality presentations and there will be a lot of information to be learned.

See you at the meeting,

Bill
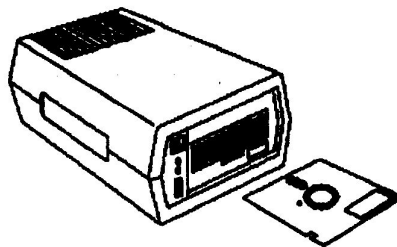
In This Issue

JUNE MEETING AGENDA

11:00 Hardware Workshop-

2:00 General Meeting

2:30 Program: Tom Bent-Everything you wanted to know about disk drives

4:30 Adjourn

KEY DATES

July

8 General Meeting

18 Executive Board· Location to be announced

21 August newsletter *DEADLINE*

August

5 General Meeting

Don't forget our **Annual Picnic** which will be held on **September 23.**

FROM THE EDITOR

- ## QL LANd

I am sorry I wasn't at the last meeting because I would have like to have seen the QL network in action. Isn't it a kick that one of the big buzz words in the MS-DOS world is the LAN (local area network)—or more accurately, the lack of one—and how much they cost? We've had them since the QL was born in 1983. Cost? A buck or two for the cable between workstations. Uncle Clive strikes again.

- ## THE SOLUTION?

Speaking of MS-DOS, I recently took The Solution by Digital Precision out for a "test drive". There certainly was a lot of time to enjoy the scenery because the program is SLOOOOOOOOOOOOW! Even with Lightning. I thought PC-ditto (the Atari MS-DOS emulator) was slow but The Solution brings a new definition to the word. If you have a program that calls for a lot of screen redrawing, forget it. Text is just barely acceptable. By my way of thinking, they are going to have to speed it up greatly for it to be anything more than a successful software designer's exercise.

- ## QUANTUM_LEVELS

Quantum_Levels—you remember them, don't you—just distributed its latest issue and it is jammed with info. In case you're wondering what happened to Syncware News, it is in the center of Quantum_Levels. Tom Bent, the Editor, indicates that the next issue will probably be the last. Lack of material being the reason. Rather than fobbing off the unfilled subscriptions to another magazine, Tom indicates that money will be refunded for the unpublished issues.

- ## CLARIFICATION

I didn't get a chance in the last issue to clarify my May comments about Tim Woods, so I'll do it now. I talked with Tim at the Capitalfest and I feel that he will get everything straightened out to everyone's satisfaction. It was not my intention to kick anyone when they are down. I was disturbed that, when things

were going sour for Tim, he abandoned the people that had supported him over the years (Time Designs subscribers) and went after a new market, the Z88. I just don't like being taken for granted. That's it. Enough said.

- ## HELP

This is an appeal for articles to be submitted on disk or microdrive, ie., something I can convert to an ASCII file so I can port it over to the Atari. If you want a painless way to do it, use the BBS. It works like a charm. I am entering the newsletter in an Atari desktop publishing contest and the entire contents must be on disk—no paste up. While I will always accept articles, no matter what form they are in, next month I would like to have at least 6 pages of articles that I can put on disk. Help me, please.

- ## MICRODRIVES SHORTAGES COMING

For those of you that don't get QL World, I will pass along

the following information from the June, 1989 issue concerning microdrives: "Ablex, the company which has made the tape cartridges since the start, reports that supplies of suitable magnetic tape from German comms giant BASF may dry up. Even if stocks are found, says production manager David McSorley, Ablex will not make microcassettes after 1989." For

Submissions to the newsletter should conform to the following criteria: If hard copy is submitted, it must be no wider that 2 3/8" in width. Hard copy is the preferred media for TS 1000 and 2068 based articles. QL users can submit microdrive cartridges or floppy disks. NO HARD COPY. If possible, though, use the BBS. (301) 588-0579.
Send to:

CATS

P.O. Box 467

Fairfax Station, VA 22039

EYEWITNESS TO HISTORY

A Report on the June Meeting

by Mark Fisher

Ya' should ha' been there!

Duane Parker's Network/Pascal demo was FANTASTIC. Five QL's extended to seven on the fly as latecomers arrived - interchanged listings, accessed programs on three different machines, and generally amazed the populace.

The lion's share of the credit must go to Duane, who prepared the material and coordinated the supply of QL's and hardware. In addition, Tom Bent's technical help and Richard Roseen's cheery tutoring at the keyboards made this presentation shine.

As you might expect with this load of duffers, Duane only got thorough perhaps 30% of the material he had prepared. I, for one, am looking foreward to the next meeting when I'll have a chance to play some more.

There were two aspects to the presentation - The network and PASCAL.

The network seemed to have the most glitz. Watching all the screens flash into action in sequence, or waiting as Duane's over worked disk drive ladled out each program or file in sequence was a thrill, and gave an idea of what a network could do (as well as a little practice in actually DOING it).

But it was the PASCAL part that probably had the most "staying power". For those that have felt the frustration of being unable to share our gems with the "un-Sinclair" (AKA IBM) world. PASCAL offers a path out. Using PASCAL, we can create ready-to-run machine code for fellow CATS members, and share our work via listing with the rest of the world.

Thanks again, Duane!

The following was taken off the BBS and was Mark Fisher's answer to a question on TS 1000 uploads.

The problem is that the 1000 holds everything as tokens. Second, the standard 1000 terminal program will not load files, and can only act as a direct terminal.

however....

It is perfectly possible to add few lines of code to a program to allow it to up-load itself into the MODEM. I've written (adapted, really) a fairly long routine to convert Timex tokens to ASCII for the 2068. Come to think of it, it would be easier to do the translatioon in the QL.

To pump your program over the MODEM, try this...

```
10 REM.........1.........2.........3
20 LET OUT 119=16514
30 LET IN 119=16523
40 LET OUT 115=16529
50 LET IN 115=16538 ...
100 RAND x+USR119
110 REM The above sends value x to port 119
120 LET A=USR IN115: REM Sets A to the value of port 115
130 REM 119 is control port, 115 is data port - further data in various pubs. ...
4000 LET x=16514
4010 LET A$="205205021211119205029023201219119006000079201"
4020 LETa$=a$+"205205021211115205029021201219115006000079201"
4030 FOR I=1 TO LEN A$-2 STEP 3
4040 POKE X,VAL A$(I TO I+2)
4050 PRINT X, PEEK X
4060 LET X=X+3
4070 NEXT I
```

That should do it. I've got copies of the material about programming the MODEM's UART chip - an '85 CTM mag. Have fun, and thanks to my wife who proofed the A$ numbers.

---

those that haven't converted over to disk drives, the info above should be the push needed to make the change. If you do convert, perhaps you ought to consider going with 3 1/2" drives. I can think of 4 reasons to do so:

1. Programs from the UK (where most come from) that cannot fit on a microdrive cartridge will be contained on 3 1/2", not 5 1/4", disks.

2. They are quieter and seem to operate more reliably.

3. The cost of the drives is down to the $75-85 range and the disks are 59 cents each from MEI (800-634-3478).

4. Most drives are sold with adaptor kits that allow you to mount them in 5 1/4" drive cases.

● AFFORDABLE LASERS

I just saw an article in PCWeek that said IBM will bring out a laser printer for $1195, yes that's correct one one nine five, to compete with the Hewlet Packard Laser Jet II, which is selling in Computer Shopper for around $1600. . This could mean that affordable laser printers are just around the corner. With this price breakthrough, it will be interesting to see if someone will come out with a laser printer driver. My guess is that you might see one with text87, which already has an Epson laser printer driver, and possibly one for the dtp programs from Digital Precision.

● IN THIS ISSUE

This is what you might call a slow news month. We have some commentary on Duane's Pascal presentation last month. Mark Fisher gives us a review of the excellent book, Chaos. Barry Washington has a second look at the QL program, Bridge Player II. Finally, as a public service, we are including a product

TONGUES

by M.A.Quintero

Aqui, la plática sera impresa con las marcas diacríticas usadas en varios idiomas. ¿Español primero, bueno? Depois vou escrever em portugues, não é? Vocês verão que é possível lançar muitas obras diferentes. J'ai perdu la plume de ma mère.

Why, you might ask, did I want to be able to do something like that? Simple, it is because I sometimes write in any of three languages and my Panasonic KX-P1092i printer NOW, after almost a year of battling, has been taught to speak in several tongues.

Despite the fact that it has eleven (countem) ASCII international character sets available there was no way that all the necessary accents and special characters could be available at the same time, Sooooo, I took up the gauntlet of down-loading fonts into the printer.

Let me say at this point that my instruction manual is good -- up to a point (as so many are) and then it bombs. Thanks to QUANTA and its programs such as Page Designer, Epscom_Fount, QL_Fount, and others, I learned an awful lot about lots of things.

First, since my printer is Epson compatible, there seemed no doubt that I could use Epscom_fount to put the characters into it. The program was designed to put your own characters into an Epson FX-85. I found that I could get new characters into my printer from character 32 to 127 and from 160 to 191, BUT no matter what I did, I could not get the middle ones to print.

I suppose I could have lived with that set-up as there was enough space for all the special characters I needed, however, since the QL has these, and more, I opted for having all 160 characters from the QL available AND for having each at the Key Press shown in the QLUG. After all, why have to make up a special table showing how one got the character wanted?

All this, by the way, is relevant to my problem up to that point as I was working in my printer's standard mode. It has, also, the IBM Proprinter mode which I had not considered using figuring that the standard mode(Epson compatible) was all that I needed. Try as I would, never could I get the middle set of characters to work.

When I used to teach geodesy, one of the aphorisms I used to quote to my students was; "A man who asks a

question is a fool for a moment: a man who does not ask a question is a fool for the rest of his life." Pity that I don't follow my advice. I did ask one CATS guru, but didn't really pursue the matter thoroughly and sort of put the matter on the back burner. Time passed.

All told, Page Designer from QUANTA has 29 draft fonts available for use. Not all, however, would you use. They are set up in two separate fonts, 32 to 127 and 128 to 191, each preceded by the number of the first valid character and the number of characters in the set. Each has the default character also. You know, that cross-hatched one that appears on your screen or printer when non-printing characters are used.

These two fonts are then combined into a set. Each character is 9 bytes long representing the 5X9 standard QDOS format.

Since I wished to have one font, 160 characters long, I needed to strip out the second set of bytes for first character, number of characters, and the default character. I wrote a short program which did this as well as changing the number of characters to 160. The result was saved as "fontname_chs", (chs denotes what the font

programs call a screen set while an existing printer set is labelled_eps) thus preparing the font for use in Epscom_Fount which I had already modified to use Super Toolkit II rather than the extensions used by Epscom_Fount.

Now, the fun part-HA! I had tried all combinations of printer DIP switch settings and software commands and nothing would get me the middle characters. Finally, admitting defeat, I spent an hour dialing the Panasonic 800 number to get "expert" advice. (Expert= a guy who's more than 30 miles away from home.) Explaining all, concisely and lucidly of course, elicited the reply that "I can't see why it doesn't work. Try the IBM mode." Back to the printer manual to learn about that mode. Up popped the first problem.

Epscom_fount takes your nine-byte character and converts it to a 12-byte character, adding at the front end the value of the "attribute" which tells whether to use the top or bottom eight rows of printhead pins to print the character(you can't use both). At the tail end, it adds two bytes to fix the space between characters. That's a total of 12 bytes per char. In addition, it places at the beginning

Tongues-From Page 5

of the set the bytes for
the control codes needed
to tell the printer to
accept the character-
bytes in its download
buffer and to set the
printer to use that
character set.
Naturally, these latter
are different for
standard and IBM modes.
That"s not a big
problem. The whole set
is saved as
"fontname_eps".

    Naturally, since our
civilization is one of
"standardized" this,
that, and everything,
the download characters
for IBM mode just HAVE
to be different,
containing 13 bytes and
having their attribute
bytes opposite. So,
there I was, needing to
write yet another short
program to change the
control code header,
convert the attribute
byte, add a zero, and
place the 11 bytes from
the eps character. (What
I actuallly did was
change the Epscom_fount
program to put the
correct attribute byte
in when it converted to
eps from chs.) The
resulting bytes were
saved as
"fontname_ips"(i for
IBM). It worked fine.

    To use in Quill, I
must   COPY_N
dev$_fontname_ips to
printer(par in my case)
and then load Quill.
(Note that to use with
TASKMASTER I need to
copy to ser and use the
extension par_use ser.)
Whatever is printed from
Quill will use the

downloaded character set
to print with which is
why I say "my printer
speaks in tongues".

    Another useful QUANTA
program which I used was
QUILL_DRIVER_BAS and its
accompanying programs.
With it, I was able to
put into QUILL five
different printer
drivers (you can use as
many as 10) which are
selected as needed when
the PRINT sequence is
executed. Mine,
naturlich, are set up
for the IBM mode and
are; 0)IBM Character 2
Set, 1)same set
compressed, 2)same set,
NLQ mode, 3)any of my
download character sets
in draft mode, and
4)any of my sets in NLQ
mode.

    Thus, when using
TASKMASTER, it is easy
to select any mode/font
wanted and load it into
the printer while exited
from QUILL into Super-
basic.

    Ein Verlagsbuchhändler
bleißt ein
Verlagsbuchhändler.
(Trans.-once a
publisher, always a
publisher.)

παθηματα   μαθηματα
(Trans.-"sufferings are
lessons"-Herodotus)

BOOK REVIEW:

CHAOS: Making a New Science by
James Glick Viking 1988, $19.95

Reviewed by Mark Fisher

Thanks, Audrey! Thanks for many
things, but partly for helping me to run
across this book. You see, one of the
attendees at the CapitolFest was Gerd
Breunug, from Vancouver, BC. When I
had a chance to drop in at his house, I
had the opportunity to leaf through this
book. I was impressed, and I nabbed a
copy as soon as I returned. It's even
better than I thought.

CHAOS presents a veiw of Science - of
Science adapting to new ideas, and
accomodating new insights. Science,
however, doesn't exist in the abstract - it
is the cooperative product of individuals.
James Glick doesn't forget these
individuals - in fact, he makes a point of
letting you get to know them as people,
while you watch them help the emerging
science of chaos to form.

That process of formation is complex. Its
beginnings are as diverse and seemingly
unrelated as the individual duets of the
Julia sets that inspired Mandelbrot. It was
the isolated individuals, thinking about
isolated problems, that made the first
steps toward popular recognition. The
story of these people, reaching out and
spinning a web of theory across
diciplines, against "common wisdom", is
the sort of thing one might expect from
Asimov; the scale of the drama, more like
Michner; and the tension, at times, more
like Crichton (Andromeda Strain,
remember?).

Modern Science is a huge endeavour,
soaking up hundreds of square miles of
real estate, millions of dollars, and the
combined attention of thousands of
people. Chaos, as a science, started out in
the "cracks" of the scientific edifice.
Some of these cracks had appeared as
long ago as 300 years. They were present
in the unsolvable formulas left out of
algebra classes, of "Monsterous" curves
invented in the 1900's and ignored
because they could not be brought under
the dome of mathematical proof, of an
alternate approach to the physics of color
by Goethe swamped by the rigid

mathematics of Newton.

Along with the diverse individuals, an
unexpected "hero" appears - the personal
computer. Its ability to provide undivided
power, available for any use the operator
desired, was critical. The thrill of the first
transition from monstrous hand-cranked
calculators to the the magical HP 65, and
the flowering of graphics power with the
modern PC is well documented here.
Much of the exploration could not take
place without it. Before the computer,
physics and engineering depended on
- analyzable- functions. If you couldn't
draw a line that held the results of the
function, it couldn't be used. Processes
that could not be predicted were
bypassed.

It was the PC that changed this for most
scientists. Instead of "solving" an
equation, they realized that you could let
the computer try out all possible solutions
over a range, and plot the successes. The
result was the literal flowering of
mathematical imagery represented by
fractals.

I'm not the only one that was moved by
the mystery of fractal images. We've see
programs to explore the Mandelbrot set in
this newsletter over the years. CHAOS,
however, shows you the ideas the
scientists applied this fractal imagery to -
from weather, to pattern recognition,
physics, economics, mathematics, biology,
ecology, genetics, crystrallography,
psychology, and a host of other
diciplines. Glick never loses sight of the
position within the scientific matrix of
each of these diciplines, and this view of
Science is one of the most useful
elements of the book.

I could go on. I liked it—and if you've
ever had an idea that didn't quite fit in
with what you were "supposed" to think
about, you will too. Let me know what
you think (BBS 588-0579).

Editorial-Continued from Page 3

review of the soft drinks most preferred
by computer programmers. I am sorry to
say that I was unable to include Hank
Dickson's article on Duane's presentation.
Hank uploaded it to our BBS but I was
unable to get a connect so that I coud
download it.

GL BRIDGE PLAYER II   REVISITED
By L.H.Washington 6/5/89

This interesting, informative and
entertaining game by HI-TECH SOFTWARE is
recommended by this reviewer to those who
play bridge or are learning bridge and
want to sharpen their skills against a
untiring and relentless opponent, (THE
COMPUTER).

The opening screen requests you to
select a speed of play from five choices
on the menu. These range from 0= (INSTANT)
to 4= (LETHARGIC), this is really window
dressing since we are talking about the
speed at which the computer plays which is
like lightening compared to most human
players. The speed which you select has no
effect on your speed of play, you may play
instantly or lethargically according to
your desires.

This program supports the Stayman and
Blackwood bridge conventions.

After selection of the speed of play,
the next screen displays the beginning of
play. The screen now shows the following:
the dealer, whether you are vulnerable or
not, your cards, the distribution of your
cards, the number of high card points in
your hand (distribution points are not
included), and the bidding that has
occurred by other players up to the time
of your first bid. You are always the
SOUTH player. Bidding is accomplished by
entering your bid such as 3D (for three
diamonds) or 1N (for one no-trump).
Bidding progresses as per regular bridge
play with the computer bidding for your
opponents and your partner. Bidding ends
when there have been three passes. At this
time the computer game departs from the
true game in that you are given the
opportunity to rebid the entire sequence
by pressing <ENTER>. If you decide not to
rebid the hand, but to play it as it has
been bid, then press the <SPACE BAR>. The
next screen shows your hand, and (after
the first card has been played), the dummy
hand along with a notation of the contract
which was bid and by which player and a
display of the number of tricks captured
during the play of this round. Cards are
played by entering <3D> for three
diamonds, <TH> for the ten of
hearts...etc. The computer plays
singletons automatically and if you try to
renege on a play (play out of suit when
you have a card of the right suit in your

hand) the computer will balk and not let you renege.

The computer plays the cards for your opponents, and when you are the defender, it plays your partener's cards. When it is your turn to play, the computer will wait for you to play a card, if you want the computer to play one of your cards for you, just press the <SPACE BAR>. As a matter of fact, you can make the computer play the whole deal, if you want to, by just pressing the <SPACE BAR> each time it is your turn to play a card. At the end of the hand, the cards held by all four players are displayed. At the same time prompts for the following five actions are presented: <1> S= Set number of points (this feature tells the computer that you want the set number of high card points in your next hand), NOTE:-since all hands are quasi-randomly selected by the computer, extreme values entered for point count can slow down the computer considerably in developing the following hands. <2> P= Reset speed of play. <3> L= Print out previous hand to printer. <4> R= Start a new rubber. <5> <ENTER>= Replay the previous hand. If the SPACE BAR is pressed, the computer will display the accumulated score. A second press of the <SPACE BAR> will initiate a new deal.

QL BRIDGE PLAYER II is a FUN game which is available from SHARP'S POB 326 MECHANICSVILLE, VA. 23111 (804)-9697

Ted Bahr

Caffeinated soft drinks: The state of the art

Perhaps the most universally recognized tool for improving a professional programmer's productivity is C. Not the C language (after all, this *is* the April issue, not February) but the C additive, Caffeine.

P.J. Plauger would have us begin this review with a definition:

caf•feine \ka-'fēn, 'ka-,\ *s* [G *kaffein*, fr. *kaffee* coffee, fr. F *café*] (ca. 1828) : a bitter alkaloid $C_8 H_{10} N_4 O_2$ found esp. in coffee, tea, and kola nuts and used medicinally as a stimulant and diuretic.

Much has happened in the Cola wars to date, and the intent here is to bring you up to speed on what seven leading contenders have to offer today. Table 1 shows a comparison of basic features, Table 2 compares performance, and Table 3 ranks the products on a variety of tests.

Diet Coke
Diet Coke is an ably launched sequel to Coca-Cola's well-known, high-calorie drinks. It scours well in the mouth and the taste is surprisingly full-bodied for a soda drained of all sugar. As a member of the Coke family, Diet Coke places well in the performance test with 46 mg. of caffeine per can.

Diet Coke supplies the user with excellent documentation, taking care to list a variety of vitamins and minerals of which it supplies less than 2% of the U.S Daily Rec-

ommended Allowances (U.S. RDA). The documentation is not perfect, however; one particular problem is sloppy indexing. Diet Coke notes that the product contains phenylalanine, a danger to phenylketoneurics, but does so in tiny letters on the front of the can, not with the ingredients where one would naturally search for it (by contrast, Diet Pepsi places this information with the other ingredients in a bright red color).

A toll-free help line is provided to support all the Coke products—their commercials play in the background while you are on hold. Diet Coke is an excellent reproduction of the market leader and maintains its good performance for programmers while nodding to the increased health-consciousness of the world today.

Mountain Dew
Long the late-night programmer's favorite with 17.4% more caffeine than any member of the Coke family and over 40% more caffeine than Pepsi, Mountain Dew means business. Clearly the heavyweight choice of this review, The Dew powers its way to a first-place finish in both calories (178.8) and sugar (44.4 mg.). Its performance pales in comparison only to Jolt.

Mountain Dew's taste is sickly sweet—the refreshing images of

people splashing around in ponds are clearly in reference to the energy derived from the drink's effect, not the taste. And the participants in the ads are certainly not programmers (imagine—swimming!). The scouring test was disappointing—the tiny bubbles seemed buried by high-fructose corn syrup.

Documentation was generally good, with more information revealed about chemical content than any product except Diet Coke. A toll-free help number is offered on the can and questions to the technical support staff were handled efficiently and pleasantly.

Mountain Dew is still sporting its peace-and-love 1960s logo. The outdated packaging combined with levels of caffeine and sugar that show almost total disregard for the 1980s health-consciousness reveal parent Pepsico's intent to market Mountain Dew as a niche product. With only Jolt to battle head-to-head on the high end, that's not such a bad idea.

Pepsi

Pepsi may be the choice of a new generation, but definitely not a new generation of programmers. Finishing dead last in performance and buried in the middle of the pack with respect to calories, Pepsi is a generally uninspired product. The user interface (taste) is distinctive, but its caffeine engine lacks the punch of the other products we surveyed.

Pepsi offers a toll-free help line and has adequate documentation, but finished at the bottom of the heap in the Grindstone (teeth-grinding after one six-pack slurped down in a two-hour period), ANSI (American Neurological Speed Institute) conformity, and compatibility with UNIX programmers. Although drinking Pepsi while chained to a 100,000-line Ada program for 36 hours will not make you a raving maniac, it probably won't keep you awake either. John Sculley left for Apple years ago, and we cannot recommend this product for serious programmers.

New Coke

Coca-Cola's new upstart is a worthy alternative to sleeping at normal hours. It placed second in both the scouring test and the Wetstone (thirst-quenching). The kid brother to Classic (real) Coke has a taste somewhere between the thinner, less-sweet Diet Coke and the heavy syrup of the original. Despite its less-sugary taste, Coke (its real name) actually has more carbohydrates than Classic Coke, leading this reviewer to wonder if the programmers who created New Coke were drinking Pepsi while they wrote the algorithms.

Coke's performance matches its siblings at 46 mg. of caffeine per can, topping all but the specialty pops aimed directly at software developers. With three relatively high-performance products to choose from in the Coke family, a programmer really can have it all.

Classic Coke

Also known as 'real Coke," this product seems to be adrift in a sea of specialized competition. Various tests provided some pretty mediocre scores for what has traditionally been considered by the general public the most high-powered cold liquid stimulant (unless you favor cold espresso).

Documentation is thin for Classic Coke drinkers and thus tends to favor users who have some familiarity with the product. What's more, the toll-free help number was not printed on any of the cans we tested! While clearly a stalwart and founding member of the caffeine collection, advantages offered by a number of competitors may be worth a taste before settling on the real thing.

Dr. Pepper

While barely edging out Pepsi in caffeine performance level and definitely qualifying as a "boutique" soft drink, Dr. Pepper's unique user interface qualified it for review. Bottled by Pepsi, Dr. Pepper has had little national advertising in the past few years, being seen as a perennial big seller in Texas and a fancy alternative to root beer.

Despite this, Dr. P weighs in as a reasonable choice for programmers. The taste is somewhat lemony, light, and fruity. Documentation is good, but Dr. P lacks a toll-free number for support. When I did call technical support, the Pepper People seemed confused. I bounced seven times before finding the right person at the right number. However, once I got there, support was excellent and very cordial.

Although Dr. Pepper cannot be recommended outright due to its mediocre performance, slipping a few in between a long night of Classic Cokes may be just the change you need.

Jolt

Taking on the established Cola giants is a brash move for a little company in Rochester, N.Y., and Jolt is playing its role as spoiler to the hilt. In the face of a huge tide of "caffeine-free" soft drinks, Jolt boasts that it has "all the sugar and twice the caffeine." On the surface, at least, it seems as if the programmer's ship has come in.

Jolt's user interface is good, containing the bite and "look and feel" of Classic Coke and winning the scouring test. Performance is stellar with 32% more caffeine than Mountain Dew, 55% more than the Coke family, and a whopping 85% more than Pepsi. Unfortunately, none of these percentages back up the slogan aimed most directly at the programming market: "twice the caffeine."

While documentation is adequate, technical support was rather dismal. Jolt had the ambience of a small company, with the receptionist answering my questions in an annoyed manner. She said the company doesn't release information on sugar content, which is odd for a firm that boasts about it on the can. When pressed about the "twice the caffeine" claim, she said it referred to sodas other than the ones we tested but wouldn't reveal which ones.

Despite a shaky feeling about the company's ethics, programmers will find much to like in a can of Jolt. The only side effect may be too much of a good thing—the Grindstone test left me unable to bear the sight of a monitor, and soon found me lurching from lane to lane at 80 mph on Rte. 101, alternately screeching at songs on the radio and babbling incoherently to myself about RISC chips. Use Jolt with caution.

The Winners

A close look at the seven contenders in this review confirmed some suspicions and raised others. Pepsi's performance rated too poorly to recommend, and Dr. Pepper's only real benefit is its unique user interface.

Any member of the Coke family can be recommended for general-purpose long bouts of coding and the company is to be lauded for maintaining performance levels in its newest releases. Jolt, the hands-down winner in pure performance, is too jarring to be recommended for prolonged use, but can be excellent for short bursts or quick patches. Based on overall excellence, the winner and sultan of swig for programmer productivity is still Mountain Dew. ■

Ted Babr is a frustrated writer who wound up as publisher of Embedded Systems Programming. *He greatly prefers iced lattés to any of the soft drinks reviewed here.*

TABLE 1.

Comparison of basic features

	Classic Coca-Cola	Coca-Cola	Diet Coke	Mountain Dew	Jolt	Pepsi	Dr. Pepper
Carbonated water	Yes	Yes	Yes	Yes	Yes	Yes	Yes
High-fructose corn syrup/sugar	Yes	Yes	No	Yes	Yes	Yes	Yes
Caramel color	Yes	Yes	Yes	No	Yes	Yes	Yes
Phosphoric acid	Yes	Yes	Yes	No	Yes	Yes	Yes
Caffeine	Yes	Yes	Yes	Yes	Yes	Yes	No
Citric acid	No	No	Yes	Yes	Yes	Yes	Yes
Sodium benzoate ("a preservative")	No	No	No	Yes	No	No	Yes
Potassium benzoate	No	No	Yes	No	No	No	No
Natural flavorings	No	No	Yes	Yes	Yes	Yes	Yes
Proud sponsor of the U.S. Olympic Team	Yes	Yes	Yes	No	No	No	No
All aluminium can	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Toll-free help number	Yes	Yes	Yes	Yes	No	Yes	No

TABLE 2.

Performance

	Classic Coca-Cola	Coca-Cola	Diet Coke	Mountain Dew	Jolt	Pepsi	Dr. Pepper
Calories (per 12 fl.oz.)	144	154	0	179	170	159	144
Sugar (grams/12 fl.oz.)	37.20	40.00	.30	44.40	NA	39.60	38.00
Caffeine (mg/12 fl.oz.)	46.00	46.00	46.00	54.00	71.20	38.40	40.80

TABLE 3.

Additional rankings (1-10)
1—Excellent, 10—Poor

	Classic Coca-Cola	Coca-Cola	Diet Coke	Mountain Dew	Jolt	Pepsi	Dr. Pepper
Compatibility with UNIX programmers	2	6	3	1	4	7	5
Scouring effect	4	2	3	7	1	6	5
Wetstone[1]	3	2	1	5	4	6	7
Grindstone[2]	3	4	5	2	1	7	6
ANSI conformity[3]	3	5	4	1	2	7	6
Sleeve of Eratosthenes[4]	4	3	7	1	2	5	6

Notes
1. Thirst-quenching.
2. Teeth grinding after one six-pack in a two-hour period.
3. American Neurological Speed Institute.
4. Staining power test conducted on standard Beefy T-shirt.

THE CLASSIFIEDS

ADVERTISING INFORMATION: CATS will run one free 1/4 page "commercial" ad per one year full ($18)
membership. Noncommercial ads may be submitted any time. Publication dates for both types will be determined by the Newsletter
Editor.

ADVERTISING RATES: Full page, $25; 1/2 page, $15; 1/4 page, $10; 2" X 2 1/2", $7

Meetings

Monthly meetings are held from 11:00 AM to 4:30 PM, on the second Saturday of each month, at the New Carrollton Public Library.

Newsletter

Memberships cost $18 per year, are good for 12 months, and include all privileges (access to libraries, group buys, etc.). A newsletter only subscription is available for persons living outside the Washington Metro area and is $12.00 per year.

Networks

Timex SIG on Compuserve: Wednesday night, 10:00 PM Eastern time (GO CLUB).

QZX BBS: (505) 522-7081 FIDO net 15, node 6. East Coast dial (703) 547-4815 FIDO net 18, node 9.

CATS BBS: (301) 588-0579, 8-N-1, 300 baud only. News and general information, 24 hours a day.

The Capital Area Timex/Sinclair Users Group

is a not-for-profit group devoted to serving the interests of those who own, use, or are interested in the Timex/Sinclair family of computers.

Executive Board

President	Bill Barnhart
1st Vice President	Hank Dickson
2nd Vice President	George Rey
Recording Secretary	Ruth Fegley
Corresponding Secretary	Joe Miller
Treasurer	Barry Washington
Members-at-Large	Mark Fisher
	Phil Russo
	Vacant
Immediate Past President	Tom Bent
Newsletter Editor & contact person	Vernon Smith (703) 978-1835

CATS maintains a gratis exchange of newsletters with approximately 30 Users Groups across the U.S. and Canada. Clubs not sending a newsletter to us for six months are automatically taken off the list.

CATS Newsletter
P.O. Box 467
Fairfax Station, VA 22039

FIRST CLASS MAIL

The next meeting of CATS will be held on:

Saturday, July 8, 1989   Hardware Workshop: 11:00 AM
                    General Meeting   2:00 PM

NOTE: AUGUST MEETING WILL BE ON 8/5 (1st Saturday)

At: New Carrollton Public Library
7414 Riverdale Road (Hwy 410), New Carrollton, MD

IF YOU ARE NOT A MEMBER OF CATS, THIS IS THE ONLY ISSUE YOU WILL RECEIVE

DUES: $18 per year, per family